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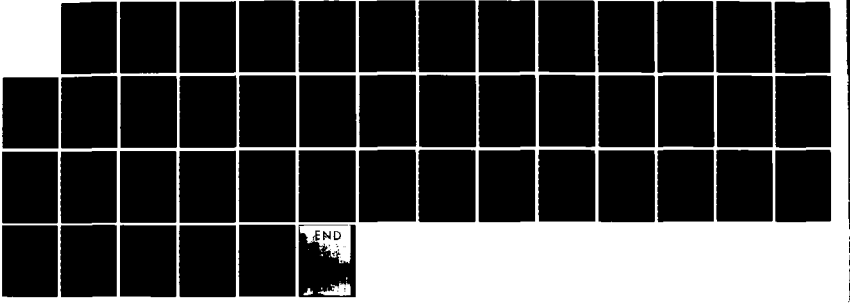

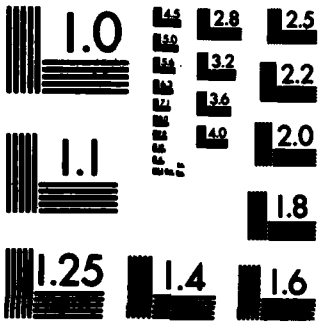

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A preliminary conceptual model for examining the effects of organizational work on the perceived quality of life (pQL) is presented. pQL is defined as affective beliefs ("hot cognitions") concerning the status of one's life. Such beliefs are proposed to be a function of life's outcomes, the standards used to judge those outcomes, and the personal importance attached to the outcomes. The potential influences of work on pQL are

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considered in terms of effects mediated by the perceived quality of work life vs. those mediated by the perceived quality of nonwork life, person-changing vs. environment-changing effects, and first-party vs. second-party effects. Implications of the model for future research are considered.

Organizational Work and the Perceived Quality of Life: Toward a Conceptual Model[1]

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Organizational Work and the Perceived Quality of Life: Toward a Conceptual Model

Abstract

A preliminary conceptual model for examining the effects of organizational work on the perceived quality of life (pQL) is presented. pQL is defined as affective beliefs ("hot cognitions") concerning the status of one's life. Such beliefs are proposed to be a function of life's outcomes, the standards used to judge those outcomes, and the personal importance attached to the outcomes. The potential influences of work on pQL are considered in terms of effects mediated by the perceived quality of work life vs. those mediated by the perceived quality of nonwork life, person-changing vs. environment-changing effects, and first-party vs. second-party effects. Implications of the model for future research are considered.

During the past decade, researchers have shown increased interest in the relationship between organizational work and the quality of workers' lives. Consider the following indications of this trend:

- there has been major growth in efforts to study and improve the quality of work life (e.g., Davis & Cherns, 1975; Hackman & Suttle, 1977; Lawler, 1982);
- the controversial Work in America (Special Task Force, 1973) report proposed work as the major "point of leverage" by which Americans might improve the overall quality of their lives;
- the Institute for Social Research (ISR) Quality of Employment surveys included quality of life indicators that went beyond immediate workplace concerns, e.g., overall life satisfaction; health; satisfaction with family, free time, and marriage (Quinn & Shepard, 1974; Quinn & Staines, 1979);
- during the early 1980's six major reviews examined the relationship between work and nonwork domains of life, or between work and some more specific quality of life indicator such as life satisfaction or health (Champoux, 1981; Kabanoff, 1980; Kahn, 1981; Near, Rice, & Hunt, 1980; Rice, Near, & Hunt, 1980; Staines, 1980).

Currently, there is no theory that can integrate these diverse activities or serve as a guide for future research of this nature. As a first step toward such a theory, we shall present a conceptual model of the relations between organizational work and the perceived quality of life (pQL). Our goal here is limited to describing somewhat formally the structure and logic of this preliminary model. We shall not, however, attempt to review and evaluate the wealth

of empirical research relevant to the interrelationships among the variables considered by the model.

Organizational Work

Philosophers and social scientists have struggled with the task of defining work (e.g., Kahn, 1972, 1982; Neff, 1977; Tilgher, 1931). Building upon their efforts, we suggest the following definition of organizational work.

Definition 1: Organizational work refers to human activities, in the context of formal organizations, performed with the intention of producing something of acknowledged social value.

This definition is modeled after the general definition of work given by Kahn (1981) and by the Work in America task force. By adopting the concept of "acknowledged social value," used in both these earlier definitions, we recognize that outcomes other than money can motivate work behavior in organizations.

To the definitions of work offered by Kahn (1981) and the Task Force, we have added the idea of "intent." This term reflects our recognition that the motives driving human activities are a key factor distinguishing work from other activities (such as play). Regardless of the eventual success or failure of work activities in ultimately producing something of acknowledged social value, they qualify as work if they were intended to accomplish some valuable outcome other than the experience of the activity itself.

Determinants of Human Action

Having defined organizational work as a special class of human action, it is necessary now to consider some general ideas about the determinants of human action. Interactional psychology provides a helpful frame of reference for these considerations (Terborg, 1981). On the assumption that human beings must interact with their environments in order to survive, interactional psychology

proposes that human action is determined jointly by characteristics of the person and properties of an environment (Murray, 1938; Lewin, 1951). Lewin (1951) succinctly summarized this fundamental premise in his famous equation: behavior = f (person, environment).

French and his colleagues elaborated upon Lewin's basic position in their model of person-environment (P-E) fit (French, Rodgers, and Cobb, 1974; French, Caplan, and Harrison, 1982). This model treats the P-E transaction as a social exchange process that can be analyzed in terms of supply and demand. The person brings a supply of abilities to the environment and demands that the environment satisfy certain personal needs. In turn, the environment makes demands on the person and supplies the person with opportunities for getting certain resources and rewards.

The concept of P-E fit is useful to an analysis of human action because it takes into account both the resources needed to perform certain acts and the motivational forces underlying the choice of specific courses of action. This interactionist perspective suggests that personal abilities are one major resource for human action and that the shape of human action is determined, in part anyway, by the degree of fit between demands of the environment and the relevant abilities of the person. Motivation to perform in particular ways is determined by a different type of P-E fit, namely, the fit between personal needs and environmental opportunities for getting rewards and resources. Behavior is motivated by both the experienced fit of contemporary needs to contemporary opportunities and by the anticipated fit of future needs to future opportunities. People are motivated to maintain positively experienced states of P-E fit and to escape from negatively experienced states (Raynor, 1982). Furthermore, people are motivated to act in ways that they anticipate will result in a good fit between themselves and their environment (Naylor et al., 1980).

Perceived Quality of Life

Our conception of pQL derives largely from work by Andrews and Withey (1976), Campbell and his colleagues (Campbell, 1976, 1981; Campbell, Converse, & Rodgers, 1976), and Locke (1969, 1976). We define pQL in the following manner.

Definition 2: The perceived quality of life is a set of affective beliefs directed toward the totality of one's life (overall pQL) or toward specific domains of life (e.g., perceived quality of work life or perceived quality of family life).

Affect is central to this definition of pQL. We have adopted Naylor et al.'s (1980) definition of affect as a variable "psychological state, or feeling--and therefore a cognition--of pleasure, happiness, well being, or satisfaction" (Naylor et al., 1980, p. 2). Direct self-report survey questions are typically used to operationalize the concept of pQL. For example, respondents might be asked to indicate their current levels of satisfaction, happiness, anxiety, worry, or general sense of well-being. Alternatively, one might ask a person to describe his or her life in terms of semantic differential adjective pairs or to report feelings about life along a scale with "delighted" and "terrible" as the end points. Diener (1984) has provided a useful conceptual analysis of pQL measures along with a review of alternative methods for assessing pQL.

The totality of life can be thought of as a mosaic field consisting of many specific domains of life in which an individual participates. As Champoux (1981) has noted, the concept of life domains can be found in the writings of many earlier philosophers, sociologists, including William James, G. H. Mead, F. Allport, and G. Simmel. Following from the work of Andrews and Withey (1976, p. 11), we shall adopt the following definition of domain.

Definition 3: A domain of life is a component of life associated with particular places, things, activities, people, social roles, or elements of the self-concept.

Quality of life surveys have often considered domains such as family, work, friendships, housing, transportation, religion, self-esteem, free time, financial security, and neighborhood.

Integrating these observations about pQL and domains, we propose a pQL specific to each of an indefinite number of domains of life experience. Furthermore, we propose that pQL for specific domains of life experience combine additively, in the manner shown by Equation 1, to create an overall pQL.

Equation 1: $pQL = (pQL{:}D_1) + (pQL{:}D_2) + \ldots + (pQL{:}D_N)$,

or expressed in summation notation,

$$pQL = \sum_{i=1}^{n} (pQL{:}D_i) ,$$

where pQL refers to the overall perceived quality of life, and $pQL{:}D_i$ refers to the perceived quality of life for each of n domains.

Domain pQL

We now turn to the processes that determine pQL within the separate domains of life such as work, family, or leisure. pQL within any given domain involves multiple outcomes associated with that domain. For example, the domain of work may involve outcomes such as pay, promotion opportunities, challenge, and co-worker relations. We propose that each of these outcomes is compared to some standard(s) that the person maintains for the outcome in question. Each outcome also holds some position on a value hierarchy maintained by that person, i.e., each outcome has some degree of personal importance. The discrepancy between outcome and standard is weighted by the personal value of the outcome. The sum

of these weighted discrepancies for all relevant outcomes within a given domain determines the perceived quality of life for that domain. This formulation can be expressed with greater precision as an equation describing the determinants of the perceived quality of life within a particular domain (pQL:D).

Equation 2: $pQL:D = W_1 (O_1 - S_1) + W_2 (O_2 - S_2 + \ldots + W_p (O_p - S_p)$, or, in summation notation:

$$pQL:D = \sum_{j=1}^{p} (W_j) (O_j - S_j) ,$$

where W_j refers to the importance weighting, O_j to the outcome, and S_j to the standard relevant to a particular outcome (j) within the domain of concern.

A concrete example involving the perceived quality of work life may clarify the process proposed by Equation 2. Assume that pay is the first outcome relevant to work. To determine the contribution of pay to the perceived quality of work life, one must assess three factors: the amount of pay experienced (e.g., O_1 = \$25,000), the personal standard the person holds for pay (e.g., S_1 = \$30,000) and the personal importance of pay to the individual (e.g., W_1 = .95 on a scale of importance ranging from -1.00 to +1.00 to reflect negative outcomes important to avoid as well as those positive outcomes that are important to achieve). For this example, pay would contribute negatively to the perceived quality of work life because an importance outcome is negatively discrepant from a standard. To illustrate further: assume that outcome 2 in the work domain is a negatively valued outcome that a person wishes to avoid, e.g., likelihood of a lay-off. If the likelihood of this negative event falls below the standard that this individual can tolerate, it will contribute positively to the perceived quality of work life. The product of a negative importance weight and a negative discrepancy contributes positively to domain pQL because it involves avoiding negative outcomes. Similar appraisals would be made for all the other outcomes relevant to the job situation in

terms of the amount received (O_j), standards for comparison (S_j) and personal importance to the individual (W_j).

One would theoretically determine the general perceived quality of work life by summing across all the weighted O-S discrepancies for all the outcomes of relevance to work. Because there is no common currency for measuring outcomes as diverse as pay, promotion opportunities, and challenge, it would seem most useful to standardize empirical measures of O and S to some fixed mean and standard deviation.

Further discussion of outcomes, standards, appraisal processes, and importance weightings is presented below.

Outcomes. By outcomes of life we mean the material and psychological results of self- and other evaluations of what Naylor et al. (1980) call the "products" of human activities. Outcomes may accrue to the person by virtue of performing certain "specified" activities, or outcomes may be awarded to the person by virtue of activities that do no more than maintain his or her membership in some social unit. For example, the availability of certain benefits and financial rewards may be contingent on certain behavioral products such as high sales, high productivity, or low rates of absenteeism. Other outcomes, such as health insurance, vacation time, or access to certain organizational facilities, may be made available to all members without any specific behavioral contingencies beyond that of maintaining membership in the organization.

The outcomes from activities and behavioral products within any domain are best considered in relation to time, as suggested by Raynor's (1982) theory of personality development. Adapting Raynor's analysis to our purposes, the pQL associated with an ongoing role (a "psychological career") in any domain of life is understood to be determined by past, present, and anticipated

future outcomes within that domain. All else being equal with regard to present outcomes, people will associate greater positive affect (higher pQL) with domains in which they can recall pleasure in past outcomes or anticipate pleasure in future outcomes. Although pQL concerns the contemporaneous experience of affect, it is clear that future and past outcomes can influence these current feeling states.

Standards. Within the present model, standard (for living) is a general term that encompasses the many different possible bases for appraisal of life's outcomes (cf. Campbell et al., 1976). Standards come in many different varieties; they may be aspirations, expectations, values, needs, motives, wants, averages, or social comparisons, to name only some possibilities. It is against such standards that life outcomes are judged by the person experiencing them. One could operationalize the concept of standards by asking people how much of a certain outcome they expect, hope for, feel entitled to, could tolerate, have received in the past, etc. Respondents could also be asked how much of the outcome in question is received by different comparison persons. We suspect that these different types of standards play a stronger or weaker role in determining pQL depending on the situations in which individuals find themselves. Furthermore, there may be strong individual differences with regard to a general reliance on certain types of standards. Unfortunately, there is little empirical research comparing the predictive power of different standards. Thus, we cannot, at this time, indicate when and for whom these different standards are more or less important in determining pQL.

Appraisal of outcomes. The pQL of any domain is a result, in part, of a cognitive appraisal evaluating the difference between one's standards and perceptions of the outcomes one is currently receiving from life, has received in the past or anticipates receiving in the future. Simply proposing that the difference between outcomes and standards determine pQL, however, is not enough.

We must also describe the nature of the functional relationship between outcome-standard (O-S) discrepancies and pQL. Several different forms are possible for such relationships, but little research is currently available to indicate the outcomes, standards, or situational variables most likely to yield one form or another. Anyone planning such research as it relates to pQL might consider the four hypothetical functions presented in Figure 1. These four functions are representative of those considered in previous theoretical discussions of the shapes such functions might take (e.g., Andrews & Withey, 1976; French et al., 1974; French et al., 1982; Naylor et al., 1980).

Insert Figure 1 about here

Within each panel of Figure 1, the abscissa portrays the simple algebraic difference between outcomes and standards (i.e., the O-S discrepancy). Discrepancies may range from negative values where standards exceed outcomes [(O-S) < zero] to positive values where outcomes exceed standards [(O-S) > zero]. The zero point in these figures represents an equality of standards and outcomes. The ordinate in Figure 1 is pQL and ranges from negative to positive; the midpoint of this dimension represents the absence of positive or negative affect (i.e., neutrality). For this analysis of the O-S discrepancy and pQL, we hold constant the effect of outcome importance. The role played by this determinant of pQL is addressed in a subsequent section of this article.

Example A in Figure 1 shows a positive linear function such that as outcomes begin to match and then exceed relevant standards, pQL moves from negative to positive. Example B reflects a situation where extreme O-S discrepancies, regardless of direction, are associated with negative pQL. In this inverted-U function, positive pQL is maximized when outcomes match standards.

Example C is a nonlinear asymptotic function in which moderate to very large negative O-S discrepancies result in a constant level of highly negative pQL (i.e., a floor effect). When outcomes are either close to matching or exceed standards, however, a linear relationship exists as in example A. Example D is another nonlinear asymptotic function. As one moves from negative to positive O-S discrepancies in example B, pQL also moves from negative to positive, but only up to a certain point. Beyond this point, increasing the magnitude of positive O-S discrepancies results in no additional increase in pQL (i.e., a ceiling effect).

The available research and theory concerning functions of the type portrayed in Figure 1 indicate that future research must include careful empirical analyses of the relationship between the O-S discrepancy and pQL (French et al., 1982; Naylor et al., 1980). It would be foolhearty to assume any one particular form of this function without empirically validating the assumption. In a later section of this article (pp. 26-27), we discuss the ways in which our basic equations might be modified to account for alternative functional forms.

Importance weightings. As shown in our equations, we have chosen to use outcome importance (Equation 2), but not domain importance (Equation 3), as a weighting factor in determining pQL. This treatment of importance weightings is based principally on Locke's (1969, 1976) analysis of job satisfaction.

Locke's analysis suggests that the O-S discrepancy should be weighted by the importance of the outcome in question (Equation 2). This weighting reflects the proposition that one can experience extreme levels of affect only when the relevant outcomes are important. With unimportant outcomes, the difference between O and S generates little affect. For example, if money is not important to someone, little affect will result from a discrepancy between earnings and personal standards for earnings. As suggested by Equation 2, this weighted discrepancy for earnings would be added to the weighted discrepancies for other

work-relevant outcomes to determine an aggregate affective response reflecting the perceived quality of work life. Weighted sums of the same form would determine pQL for other domains of life.

Locke's analysis also suggests that the general importance of a domain should not be considered as a weighting factor when adding the perceived quality of work life to the perceived quality of life in other domains to determine overall pQL. Hence, Equation 1 includes no weighting for general importance of specific domains such as work or family. According to Locke, importance has already played its role in **weighting** the specific outcomes to determine pQL for the domain in question. It is assumed that general importance of a domain such as work is based on the importance associated with the individual outcomes within that domain. Hence, domain importance is redundant with outcome importance. Given the redundancy of these two forms of importance information, no increment in predictive power could be gained by adding a general domain importance weighting to Equation 1 when predicting overall pQL from pQL for specific domains.

Several investigators have shown that domain importance weightings do not improve the ability to predict overall satisfaction from domain-specific satisfaction scores (e.g., Campbell et al., 1976; Dachler & Hulin, 1969; Quinn & Mangione, 1974). For example, Campbell et al. (1976) compared the predictive powers of weighted and unweighted models. In the unweighted model, overall life satisfaction was predicted by the simple sum of satisfaction with specific domains of life such as family, work, or leisure. In the weighted model, each domain satisfaction score was multiplied by the importance with which it was rated by the respondent. The weighted model was no more successful in predicting overall life satisfaction than was the unweighted model. Locke's analysis explains this result by proposing that the role of importance was already felt in determining satisfaction within the specific domains; adding such information a second time was, therefore, redundant and failed to improve prediction.

Naylor et al. (1980) suggest a useful way of recognizing importance within functions of the type presented in Figure 1. They argue that the importance of an outcome is reflected in the slope of the curve describing the function. If the outcome is a relatively neutral one, then the different levels of the O-S discrepancy will have little impact on affective responses and the curve will be relatively flat. Conversely, more important outcomes will yield steeper functions since the discrepancy between outcome and standards carries a strong affective connotation.

Importance weightings could be operationalized in several ways. Respondents could simply be asked to report how important different outcomes are to them. Alternatively, they could rank different outcomes in terms of some concept such as anticipated satisfaction, importance, or personal desirability. It is also possible to obtain importance weightings through the analysis of paired comparison choices among different amounts of different outcomes (e.g., Hogarth, 1980).

Overall pQL in Terms of Domain-level Concepts

Combining Equations 1 and 2, we can express the overall pQL in terms of domain-specific outcomes, standards, and importance weightings as shown in Equation 3.

$$\underline{\text{Equation 3}}: \quad pQL = \sum_{i=1}^{n} \sum_{j=1}^{p} (W_{ij})(O_{ij} - S_{ij}) \ .$$

This equation concerns a matrix created by crossing p outcomes by n domains, where W_{ij} refers to the importance weighting, O_{ij} to the outcome, and S_{ij} to the standard relevant to a particular outcome (j) in a particular domain (i). Thus, the overall pQL is the sum of the weighted discrepancies between outcomes and standards for each of the p outcomes found within each of the n domains of life.

We view pQL as being akin to what Zajonc (1980) has called a "hot" cognition. Hot cognitions are beliefs accompanied by a substantial affective charge. They are evaluative judgments reflecting an amount of some entity along a good-bad dimension. In contrast, "cold" cognitions are descriptive judgments reflecting an amount of some entity along a dimension not clearly characterized by good and bad endpoints (Naylor et al., 1980). Within our formulation, it is importance that provides the affective charge to pQL. The perceived discrepancies between cognitions concerning standards and outcomes are emotionally charged by outcome importance weightings to produce pQL as the net resultant affect.

Graphic Portrayal

The concepts we have introduced to explicate the determinants of human actions and pQL are summarized graphically in Figure 2. For simplicity, only two domains are considered: work and nonwork. The nonwork domain is a residual defined by exclusion. All that is not work falls into this category (e.g., leisure, family, community affairs, etc.).

Insert Figure 2 about here

In the top portion of Figure 2, arrows from the environment (A or B) and from the person (C) join together and lead to domain activities (D or E) as a way of portraying the Environment X Person interaction that determines human action. The length of the two abutting arrows is adjustable to reflect relative contributions of environmental and person determinants of behavior. A longer person arrow would be used when individual differences play a strong role ($\longrightarrow \leftarrow$) and a shorter person arrow would be used when the effect of individual differences is slight ($\rightarrow \longleftarrow$). The absence of an arrow directly linking the environment or the person to either work or nonwork activities further reflects our interactional orientation to human action. Neither the person nor the environment alone determines human action.

Arrows connecting nonwork or work environments to the person are double-headed to indicate that a person can proactively change his/her environment as well as be changed by it (Terborg, 1981; Weick, 1979). Such changes in environment are often the result of altered activities; hence we also have arrows leading from activities to environments.

The ideas basic to Equations 1-3 are represented in the lower part of Figure 2. The additive model presented in Equation 1 is portrayed by summing pQL for work and pQL for nonwork to yield overall pQL (J + K = L). Equation 2 is portrayed by depicting the person (C) as the source of both standards and importance judgments (G and H). Activities within a given domain (D and E) result in the specific outcomes that an individual must appraise in order to determine the pQL within the domain (F and I). The feedback loops leading from overall pQL and domain pQL back to the person reflect the impact of experienced affect on relevant characteristics of the person, e.g., the affect actually experienced by the person at one point in time may influence the affect associated with similar events at a later point in time by affecting either the standards or importance weightings used in subsequent evaluations of pQL.

The remaining features of Figure 2 are discussed in later sections of this article.

Empirical Support

No single study or group of studies can be pointed to as support for the general interactionist view of human actions we have adopted. However, this position has been accepted as a general paradigm for major subfields of the social and behavioral sciences, e.g., social psychology, personality psychology, and organizational behavior. Research in these several disciplines has recognized that both person and situational factors must be considered to explain human behavior. Terborg's (1981) review identifies many spectifc

research programs illustrating the empirical validity of the interactional perspective.

Several specific lines of research support the determinants of pQL proposed in Equations 1-3. The additive model presented in these equations is well supported by Campbell et al. (1976), Andrews and Withey (1976), and Michalos (1980, 1982, 1983b). In these studies, satisfaction and happiness with life as a whole have been predicted from satisfaction and happiness with specific domains of life. Simple additive linear models have provided quite accurate predictions, typically accounting for 50-60 percent of the variance in the measures of overall pQL. Furthermore, Andrews and Withey (1976) demonstrated convincingly that more elaborate models incorporating nonlinear and interaction effects did not improve prediction beyond that provided by the simple additive model.

Available data also support the operation of standards, outcomes, and importance weights as proposed in Equations 2 and 3. Locke's (1969, 1976) job satisfaction research, already discussed, is consistent with the way we have used importance as a weighting factor. Michalos (1980, 1982, 1983a, 1983b) provides extensive evidence showing that pQL measures can be predicted from the discrepancy between achieved outcomes and personal standards (i.e., the O-S discrepancy). In addition to his own data on this issue, Michalos (1983a) identified 41 other studies supporting the predictive power of discrepancy models.

Research testing the P-E fit model provides empirical support for the alternative functional forms portrayed in Figure 1 (French et al., 1982; Kahn, 1981). The E variable in this research is the amount of some outcome provided by the environment and the P variable is the amount of the outcome desired by the person. Thus, the P-E fit is one instance of an O-S discrepancy. The particular outcome in question appears to determine which form the function will

take. Some outcomes yield linear P-E fit functions while other outcomes yield the inverted-U function or one of the asymptotic functions.

This brief overview of relevant research findings suggests that there is considerable "antecedent validity" (Schutz, 1966) for various specific features of our general conception of human activities and pQL. Because original data have not yet been collected for an explicit test of our pQL model as a whole, its "evidential validity" (Schutz, 1966) is undetermined.

Compatibility With Other Theories

Subsequent to the generation of our model, Diener (1984) published a review identifying six general categories of theory seeking to explain subjective well-being, a concept very close to what we have defined as pQL. Diener's review provides a means of comparing the model presented here to other theories concerned with similar issues. Because of space limitations, we cannot provide a point-by-point comparison of this type in the present article. However, we can share the conclusions of such a comparison. We found the present model to be generally consistent with the major propositions of the subjective well-being theories reviewed by Diener. Indeed, we were encouraged be the ease with which we were able to translate concepts and relationships from quite diverse theories into the terms and structure of our formulation of pQL.

Effects of Organizational Work on pQL

Having considered the factors that determine human action and pQL, we can return to our central concern: an analysis of how the experience of organizational work can influence pQL. The experience of work consists of exposure to the workplace environment and the performance of work activities. Thus, work experience consists of what you do and what happends to you in the organizational work domain. Our analysis of the pQL effects of work is presented in the form of four basic propositions. These propositions are derived from

the definitions we have offered for our major concepts (i.e., work and pQL) and from the general processes we have postulated to determine each of them (i.e., the interactionist model of human activities and the three component model of pQL represented by Equations 1-3).

Proposition 1: The influence of organizational work on the overall perceived quality of life may be mediated by changes in the perceived quality of work life and/or by changes in the perceived quality of nonwork life.

pQ work life mediated effects. Changes in the work environment or in work activities may have effects on overall pQL that are mediated by changes in the perceived quality of work life. In reference to Equation 1, changes in the perceived quality of work life component may result in changes in the composite score representing overall pQL. Effects of work on overall pQL mediated by the perceived quality of work life must involve one or more of the three determinants of the perceived quality of work life, i.e., the outcomes of work, the standards used to appraise those outcomes, or the personal importance of the outcomes being appraised (I or H in Figure 2).

The B-E-I pathway in Figure 2 is one of the several possible ways in which the perceived quality of work life can mediate the effect of work on overall pQL. In this path, the outcomes of work are altered by changes in the work environment and the way work is performed, e.g., through job redesign. Enhanced perceived quality of work life contributes in turn to an enhanced overall pQL (the full sequence being B-E-I-K-L). This path is one considered frequently by those involved with quality of work life experiments (e.g., Davis & Cherns, 1975; Hackman & Suttle, 1977; Lawler, 1982).

pQ nonwork life mediated effects. Less obvious is the possibility that the effects of work variables on overall pQL can be mediated through changes in the perceived quality of nonwork life. That is, changes in the work environment or work activities can result in increments or decrements in the perceived quality of nonwork life, thereby affecting the overall pQL. According to our model of pQL, nonwork mediated effects of this type must involve at least one of the three variables proposed as determinants of nonwork pQL: the outcomes, standards, or importance of outcomes in specific nonwork domains (F or G in Figure 2).

The possible results of a communication skills training program can serve to illustrate nonwork mediated effects of work on pQL. Through training on the job, a person may develop better communication skills. These skills may allow that person to communicate more effectively with his/her spouse, thereby enhancing the perceived quality of marital life, and ultimately an improved pQL overall (path B-E-C-D-F-J-L in Figure 2).

A single work variable may have effects on overall pQL that are mediated through both the perceived quality of work life and the perceived quality of nonwork life. For example, the introduction of a flextime program might affect overall pQL through improvements in the perceived quality of work life. Flextime may also have effects on overall pQL that are mediated by nonwork, e.g., the perceived quality of family life or leisure life may improve because of an increased opportunity to engage in these activities at a time of one's choice.

Effects of work on pQL mediated by the perceived quality of work life are represented by any pathway in Figure 2 that begins with the work environment (B) or work activities (E), passes through the perceived quality of work life (K), and ends with the overall pQL (L). Conversely, a pathway represents a nonwork-mediated effect of work if it begins with the work environment or work

activities and terminates at the overall pQL without passing through the perceived quality of work life. Figure 2 suggests that there are a large number of potential routes by which work can influence overall pQL; some of these routes are mediated by pQ work life (K) while others are mediated by pQ nonwork life (J).

Proposition 2: Organizational work variables may influence the perceived quality of life associated with a particular domain through effects on the person and/or on the environment in which the person must function.

When a work variable has the effect of changing a person performing either work or nonwork activities, it is labelled a "person-changing" effect. Person-changing effects may be either short term or long term. Changes in mood, deprivation-satisfaction level, or energy level resulting from work performance are examples of possible short-term person-changing effects of work. Work-induced changes in personality, skills, and values, on the other hand, are examples of the long-term person-changing effects of work. There is considerable research suggesting that work can influence important enduring properties of the person, e.g., physical health (Kahn, 1981), mental health (Kornhauser, 1965), child-rearing values (Kohn, 1969), and even cognitive abilities (Kohn, 1980).

When a work variable has the effect of changing the work or nonwork environment in which a person must function, it is labelled an "environment-changing" effect. For instance, working overtime or work-required geographic relocation can alter the environment in which parental or spouse roles are performed through restraints on time and location available for performance of these nonwork roles.

Certain work variables may have both environment-changing and person-changing effects. For example, working a night shift may have short-term person-changing effects of fatigue resulting from difficulty sleeping well during the day. However, night work may also have environment-changing effects, e.g., the home environment provides less out-of-school time with children (Mott, Mann, McLaughlin, & Warwick, 1965).

Person-changing and environment-changing effects can be traced graphically in Figure 2. The arrows leading into the person variable (C) are person-changing effects; this includes the arrows running from the two environmental sectors and those running from the two domain-related activities (A-C, B-C, D-C, or E-C). All arrows leading into either of the two environmental sectors (A and B) represent environment-changing effects (D-A, C-A, E-B, C-B, A-B, B-A).

Social Context of Work and pQL

We will now consider the social context in which individuals often act. Most activities in both work and nonwork domains occur within social systems organized in terms of social roles. Role-related concepts take into account the effects of actions performed by other people in an individual's experience of life.

From a role perspective, it is apparent that the pQL of other people can be influenced by the focal person's work. Following Kahn et al. (1964), "focal person" refers to the person who is the primary focus of analysis. We use the term second party effects to describe linkages where the work of a focal person influences the pQL of other people (second parties). Recognition of these effects leads to two final propositions.

Proposition 3: The overall pQL of people who work in organizations can be influenced by the organizational work experience of other people.

Proposition 4: The overall pQL of people who are not themselves organizational workers can be influenced by organizational work.

Our third proposition is relevant to working people who spend part of their lives with other people who themselves are also organizational workers, e.g., dual-worker families. Each working member in a dual-worker family can be influenced by the other member's work (Staines & Pleck, 1983). These influences could be felt in several ways. The focal person's work may affect nonwork activities and, in turn, influence the nonwork quality of life for the spouse. The work of a focal person may even affect the spouse's overall pQL through changes in the perceived quality of the spouse's work life. For example, the spouse may be financially freed to pursue lower paying but personally more rewarding work because of the financial resources provided by the work of the focal person. This alternative line of work may provide a greater perceived quality of work life for the spouse than would the higher paying work. Much of the research on dual-worker families can be interpreted in terms of these second-party effects (e.g., research concerning the effect of a working wife on husband's pQL, Burke & Weir, 1976; Booth, 1977).

Proposition 3 is also relevant to the issue of what might be called contagion effects in the workplace. The organizational work experiences of co-workers can potentially influence the pQL of the focal person. Through interaction with co-workers, the focal person may act in a manner that leads to certain outcomes. Alternatively, such interaction may lead the focal person to adopt different standards or importance values. The resultant pQL enjoyed by the focal person can be influenced by changes in any one or more of the three basic pQL determinants: activity outcomes, standards, or importance judgments.

Our fourth proposition argues that the pQL of nonworkers can be indirectly influenced by work. For example, the work of parents can influence the pQL of their children even though the children themselves do not work. Many of the resources (money, time spent with parents, status, opportunity) that determine, in part, the behavioral outcomes experienced by such nonworkers are the result of their parent's work. Also, the standards and importance weightings adopted by children can be influenced by the work of their parents (e.g., Kohn, 1980). These potential effects of work on nonworkers are well illustrated by research concerning the special problems encountered by children and full-time homemakers associated with husbands/fathers in particular occupations. Such research has considered, for example, the families of military personnel (Hunter, in press), police officers (Maynard et al., 1980), clergymen (Scanzoni, 1965), and corporate executives (Seidenberg, 1973).

Implications

Our model offers a broad social psychological view of organizational work and pQL. Several major themes expressed in it are summarized below.

1. Organizational work can influence the perceived quality of life as well as the objective quality of life.
2. Organizational work can influence the perceived quality of life (pQL) through changes in personal standards and importance judgments as well as through changes in outcomes resulting from specific activities.
3. The effects of organizational work on the overall quality of life can be mediated by changes in the quality of nonwork life as well as by changes in the quality of work life.
4. Organizational work can have environment-changing effects on the quality of life as well as person-changing effects.
5. Organizational work can influence the quality of life for nonworkers as well as for workers.

6. The quality of one's life can be influenced by others' organizational work as well as by one's own organizational work.

These six thematic statements are logically consistent with each other. Furthermore, each of them can be logically derived from the analysis presented earlier for the determinants of both work activities and pQL. As a result, these summary statements, and the analysis underlying them can, in the future, serve as the basis of a more fully developed theory of organizational work and the quality of life.

By repeatedly using the term "as well" in the six summary statements, we intended to emphasize the multiple pathways by which work can influence the quality of life. To fully understand the many different possible types of work-related effects on the quality of life, it is necessary to consider work within the context of a whole, integrated person and his/her total life environment. Because it concerns the extent to which one's personal needs and wants are met by one's life experience, the quality of life concept requires that we attend holistically to the integrated individual, not merely to segmented roles. Even though a person may be only "partially included" (Katz & Kahn, 1978) in a work role, it is the whole person who must come to work each day to perform that role. Consequently, an analysis of the quality of life outcomes resulting from work is inadequate if it is limited solely to the work role and the workplace environment. It is also necessary to consider how experiences in the work domain affect people and their environment as they pursue the rest of their lives. Hence, our model encompasses concerns about nonwork roles, nonwork environments, nonworkers, and work performed by people other than the focal person.

Future Research

Some specific directions for future research are suggested by the social psychological analysis of work and pQL that has been outlined here.

Outcomes and time. Recall that the comparison of outcomes and standards is thought to apply simultaneously to present, past, and future outcomes. A key problem for future research is to discover when different time-based outcomes predominate. Once workers reach a certain career stage or age level, does their pQL in the work domain depend primarily on past outcomes? Are certain domains more likely to be appraised predominantly in terms of past, present, or future outcomes? Knowing the circumstances under which certain time-based outcomes become more or less important will contribute much toward understanding the basic appraisal process underlying pQL.

Multiple standards. The appraisal process is also complicated by the need to take account of simultaneous operation of multiple standards. It seems likely that any single outcome may be evaluated simultaneously against several different standards such as aspirations, expectation, and comparison levels. It is important to determine the conditions under which these various standards play a role in determining pQL.

Interaction effects. We have proposed that overall pQL is simply the sum of pQL in the separate domains of life. Nonetheless, the notion of interaction effects is intuitively appealing. The combinations of life experiences in several domains may contribute nonadditively to one's sense of overall pQL. For example, the absence of serious conflict between work life and family life many contribute positively to overall pQL in a way that goes beyond the additive effects of pQL in the two domains. Because analyses of interaction effects have not yielded convincing empirical evidence (e.g., Andrews & Withey, 1976; Campbell et al., 1976), we have not included them in our equations. We have assumed that the 40-50% of the variance not accounted for by the additive models tested in pQL research is the result of less than perfect reliability and the use of less than complete listings of domain pQL scores. Future research should test

the hypothesis that interactive effects can add to the predictive power of the basic additive model. If the results prove substantial, the equations could be revised so that interactive effects are added to the basic additive model.

The outcome-standard (O-S) discrepancy. We have proposed that the affective response accompanying the outcome-standard discrepancy can take any of several functional forms (see Figure 1). Knowing the form(s) a particular set of discrepancies will take is necessary to predict the resulting pQL. To reach this point, research needs to address some basic questions about the O-S discrepancy. For instance, does the form of the discrepancy depend on the domain being considered, the nature of the outcome being appraised, the type of standard being applied, the characteristics of the individual, or some combination of these factors? Only careful empirical analyses can address questions of this type. Based on such research, appropriate modifications of the basic equations could be introduced, e.g., absolute values, constants, and exponents as required by the particular functional form in question. We have considered only the simplest case of direct linear relationships and the algebraic difference between outcomes and standards in Equations 1-3. More complex functional relations will require more complex equations to describe them.

Hypothesized effects of work variables. The model distinguishes between several different hypothetical effects of work on pQL: effects mediated by the perceived quality of work life vs. those mediated by the perceived quality of nonwork life, person-changing vs. environment-changing effects, first-party vs. second-party effects. Research is needed to determine if there are specific work variables that actually yield empirical effects of the type proposed in our model.

Action research. Our pQL model should be useful for guiding action research as well as basic research. It suggests a set of outcome and process

variables to include in planning and evaluating workplace innovations such as flextime, job sharing, quality circles, employee involvement, etc. In the terminology of the Work in America task force, such innovations seek to exercise the "point of leverage" attributed to work. That is, they seek to improve the quality of life by introducing change in the workplace. The model presented here suggests that a broad perspective is required to assess the impact of such workplace changes on the quality of life. It could be a serious mistake to limit an evaluation of such innovations to workplace concerns and work behaviors. To thoroughly evaluate the impact of workplace experiments on overall quality of life, it is also necessary to consider the effects of work on the nonwork lives of workers and on the lives of those with whom workers are involved in the nonwork portions of their lives.

Conclusion

In our analysis of the manner by which work may influence the perceived quality of life, we have stressed the psychology of it. We have linked pQL to the more general idea of human health and well-being. We have proposed that pQL expresses something important about the psychosocial status of people's lives. Advancement of theory in this area beyond its current rather primitive state depends upon improved conceptualization of the elements of pQL and the interrelations among these elements as well as on well-designed empirical research. The preliminary model described above and the proposals offered in the course of its presentation, we trust, are helpful steps in this direction.

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Footnotes

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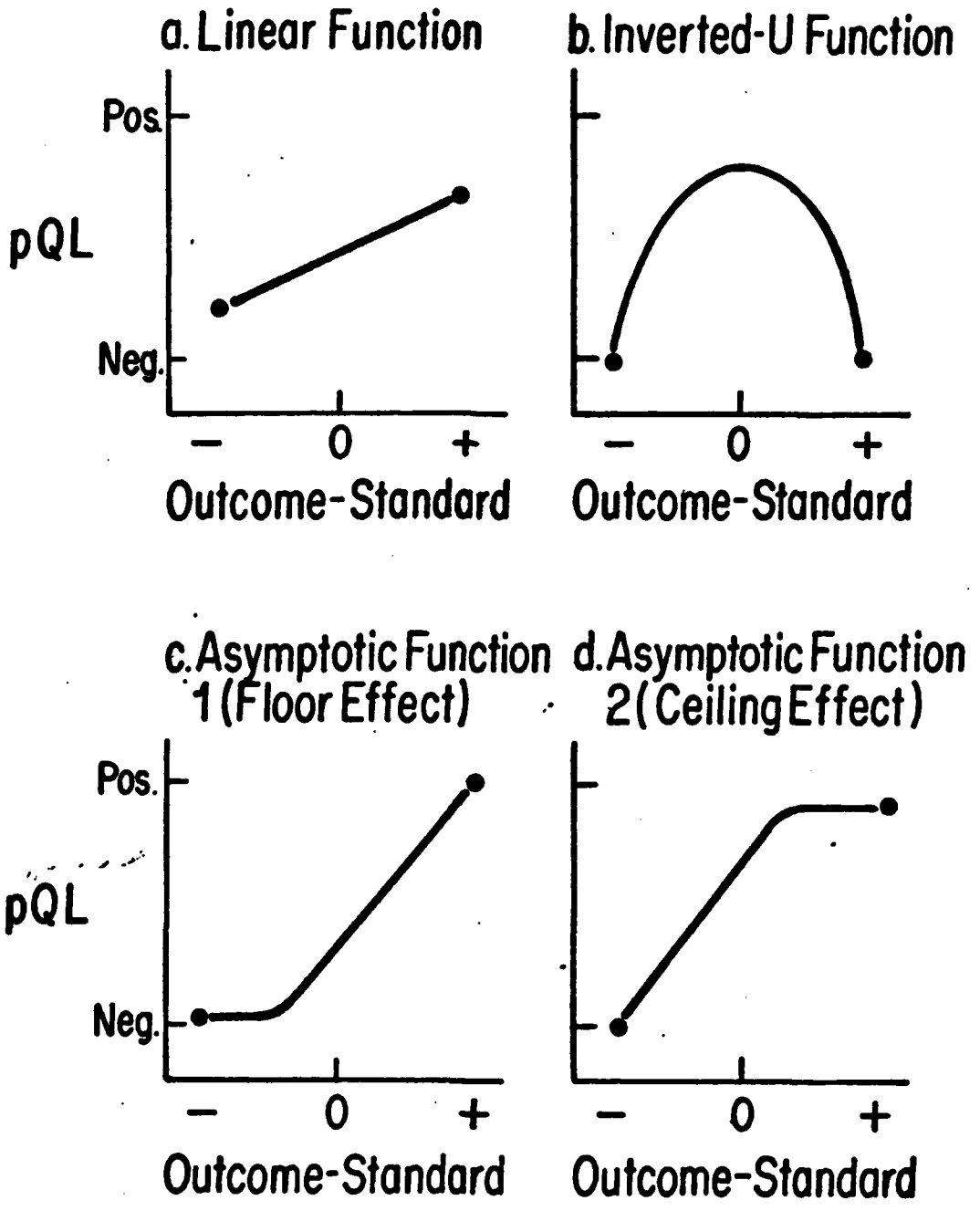

Figure 1.

Perceived quality of life (pQL)
as a function of the outcome-standard (O-S) discrepancy.

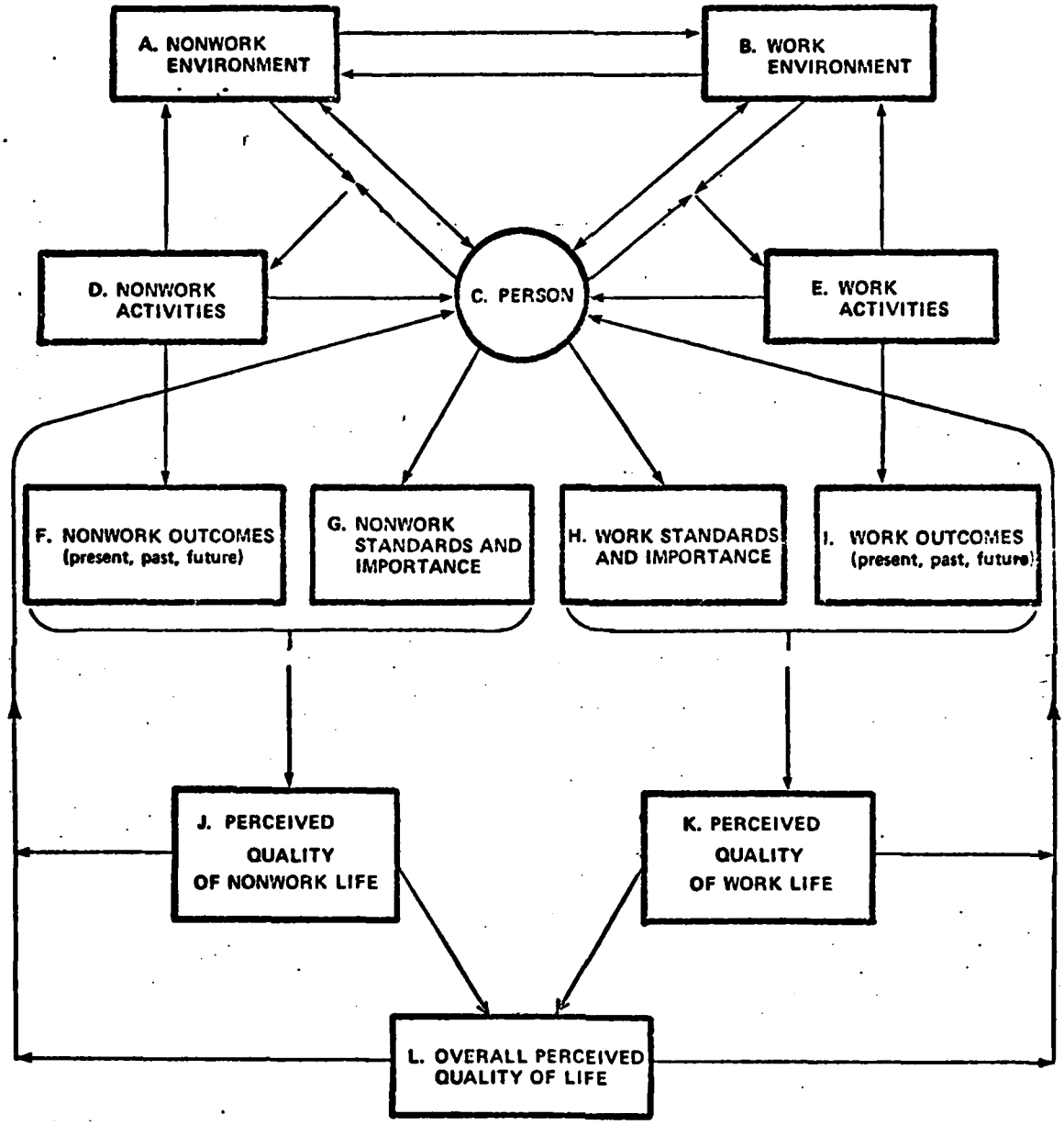

Figure 2.

A model of work and the perceived quality of life.

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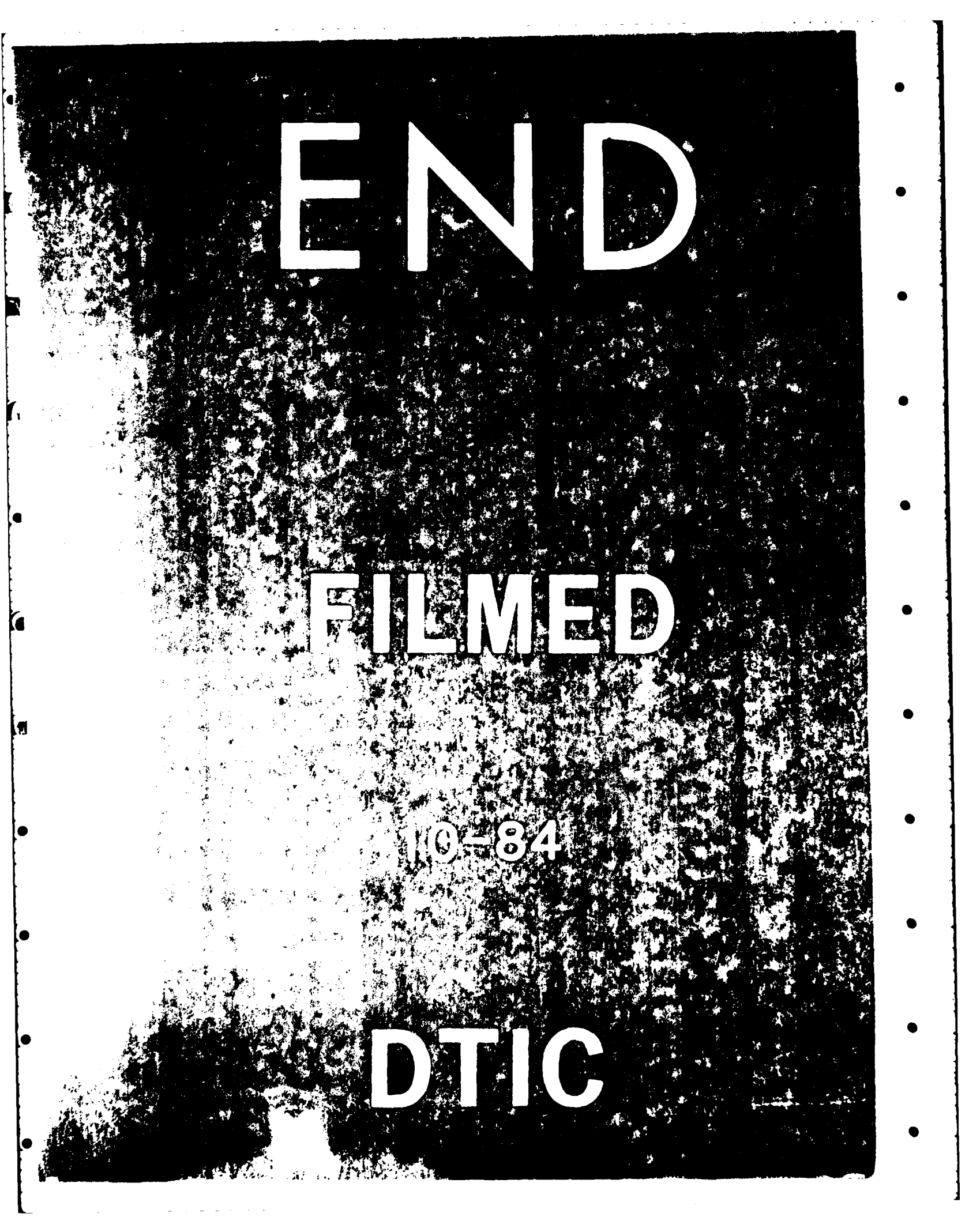
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